

TOOLS TO BRING



Flashlight



Jack



Jackstands

MAKE

MODEL

VIN

SCAN-TOOL CODES (IF ANY)

KEY



Code reader



Clean, white rags



Magnet

	MILEAGE
YEAR	ASKING PRICE

KEY



Noted, but
not serious



Cause for
concern



Serious
issue

DEAL BREAKER

Flee the premises.

THE BASICS

	Yes	No
1 Is the owner's manual missing?	<input type="checkbox"/>	<input type="checkbox"/>
2 Are there large gaps in the service history or no records at all?	<input type="checkbox"/>	<input type="checkbox"/>
3 Do you suspect the mileage isn't legitimate?	<input type="checkbox"/>	<input type="checkbox"/>
DEAL BREAKER		
4 Does the title include the word "salvage"?	<input type="checkbox"/>	<input type="checkbox"/>

EXTERIOR

5 Is there evidence of curb damage on the wheels?	<input type="checkbox"/>	<input type="checkbox"/>
6 Are the windshield wiper blades damaged?	<input type="checkbox"/>	<input type="checkbox"/>
7 Are any hubcaps missing, damaged or loose?	<input type="checkbox"/>	<input type="checkbox"/>
8 Are all the tire pressures properly set?	<input type="checkbox"/>	<input type="checkbox"/>
9 Is the paint faded or cracked?	<input type="checkbox"/>	<input type="checkbox"/>
10 Are any panels a different shade or color?	<input type="checkbox"/>	<input type="checkbox"/>
11 Are any of the panel gaps markedly different than the others?	<input type="checkbox"/>	<input type="checkbox"/>
12 Are any of the trim pieces loose or missing?	<input type="checkbox"/>	<input type="checkbox"/>
13 Does a magnet fail to adhere to the sheet metal? (Try several spots.)	<input type="checkbox"/>	<input type="checkbox"/>
14 Are any of the tires a different brand or size?	<input type="checkbox"/>	<input type="checkbox"/>
15 Is there evidence of accident damage that has been poorly repaired?	<input type="checkbox"/>	<input type="checkbox"/>
16 Are lug nuts missing?	<input type="checkbox"/>	<input type="checkbox"/>
17 Are there any small dark spots or oily film on the bumper near the exhaust pipe?	<input type="checkbox"/>	<input type="checkbox"/>
18 Are there any small rust spots?	<input type="checkbox"/>	<input type="checkbox"/>
DEAL BREAKER		
19 Is there rust everywhere?	<input type="checkbox"/>	<input type="checkbox"/>

INTERIOR

20 Are there any tears or wear marks in the seats?	<input type="checkbox"/>	<input type="checkbox"/>
21 Are there any cracks, blemishes or broken trim?	<input type="checkbox"/>	<input type="checkbox"/>
22 Are the spare tire, jack and tools damaged or missing?	<input type="checkbox"/>	<input type="checkbox"/>
23 Do any of the windows go down or up slower than the others? Do they make noises?	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
24 When the climate control is turned on, does the fan squeak or rattle or operate on only one speed setting?	<input type="checkbox"/>	<input type="checkbox"/>
25 Does the air conditioning blow warm air?	<input type="checkbox"/>	<input type="checkbox"/>
26 Turn on all the accessories (windshield wipers, radio, power mirrors, etc.). Do any fail to operate properly?	<input type="checkbox"/>	<input type="checkbox"/>
27 Is the brake pedal worn more or less than the mileage on the odometer would suggest?	<input type="checkbox"/>	<input type="checkbox"/>
28 Is there any rust or evidence of water in the spare-tire well?	<input type="checkbox"/>	<input type="checkbox"/>
29 Does the sunroof operate slowly, as if it's struggling to move?	<input type="checkbox"/>	<input type="checkbox"/>
DEAL BREAKER		
30 Is there a stale smell, like mildew or spoiled milk?	<input type="checkbox"/>	<input type="checkbox"/>
31 Is there evidence of water damage in the glovebox or under the rear seat?	<input type="checkbox"/>	<input type="checkbox"/>

CHASSIS/UNDERBODY

32 Are any of the inner fender shields missing or broken?	<input type="checkbox"/>	<input type="checkbox"/>
33 Put your knee on the bumper, bounce the car three times, then stop. Does the body move up and down more than two times?	<input type="checkbox"/>	<input type="checkbox"/>
34 Is there uneven wear on any of the tires?	<input type="checkbox"/>	<input type="checkbox"/>
35 Does oil coat any of the shock absorbers?	<input type="checkbox"/>	<input type="checkbox"/>
36 Jack up the car and safely support it so the wheels are off the ground. Tug and push on the wheels. Is there any lateral play at the hub?	<input type="checkbox"/>	<input type="checkbox"/>
37 Pull on the tie rods and the suspension mounts. Do you detect any movement?	<input type="checkbox"/>	<input type="checkbox"/>
38 Are the brake pads and rotors worn out?	<input type="checkbox"/>	<input type="checkbox"/>
39 Is there rust on any of the underbody surfaces?	<input type="checkbox"/>	<input type="checkbox"/>
40 Check the engine bottom. Any sign of fluid leaks?	<input type="checkbox"/>	<input type="checkbox"/>
41 What about transmission and differential leaks?	<input type="checkbox"/>	<input type="checkbox"/>
42 Is there any bent or dented metal?	<input type="checkbox"/>	<input type="checkbox"/>
43 Are there shiny marks on the pinch welds?	<input type="checkbox"/>	<input type="checkbox"/>
44 Is there fluid seepage around the brake caliper or from the bottom of the brake drums?	<input type="checkbox"/>	<input type="checkbox"/>
45 Check the ground under the car. Are there any puddles of oil or fluid?	<input type="checkbox"/>	<input type="checkbox"/>
46 Look at the bottom of the radiator. Is it wet from coolant?	<input type="checkbox"/>	<input type="checkbox"/>

USED-CAR CHECKLIST

Popular Mechanics

ENGINE

Yes

No

- | | | | |
|-----------|--|--------------------------|--------------------------|
| 47 | With the engine off, squeeze the hoses (be careful, they may be hot). Do they feel stiff or brittle? | <input type="checkbox"/> | <input type="checkbox"/> |
| 48 | Are there cracks in the belt(s)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 49 | Are there any wires not covered by sheathing? | <input type="checkbox"/> | <input type="checkbox"/> |
| 50 | Are there any loose hose clamps? | <input type="checkbox"/> | <input type="checkbox"/> |
| 51 | Are there any loose and corroded battery clamps? | <input type="checkbox"/> | <input type="checkbox"/> |
| 52 | Is the battery more than 4 years old? | <input type="checkbox"/> | <input type="checkbox"/> |
| 53 | Is there any sign of fluid leaks at the accessories (power-steering pump, brake reservoir)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 54 | Any evidence of nesting mice or other animals? | <input type="checkbox"/> | <input type="checkbox"/> |
| 55 | Is the air filter dirty? | <input type="checkbox"/> | <input type="checkbox"/> |
| 56 | Are fluid levels (power steering, brake, coolant, oil and transmission) below the minimum? | <input type="checkbox"/> | <input type="checkbox"/> |
| 57 | Check for oil change stickers. Is the car long overdue? | <input type="checkbox"/> | <input type="checkbox"/> |
| 58 | Is there seepage at the bottom of the brake reservoir? | <input type="checkbox"/> | <input type="checkbox"/> |
| 59 | Is there sludge in the bottom of the coolant reservoir? | <input type="checkbox"/> | <input type="checkbox"/> |
| 60 | If the engine has a timing belt, is it older than 4 years? If unknown, answer "yes." | <input type="checkbox"/> | <input type="checkbox"/> |

DEAL BREAKER

- | | | | |
|-----------|--|--------------------------|--------------------------|
| 61 | Put a drop of oil from the dipstick on a clean, dry rag. Does it appear gooey or black? | <input type="checkbox"/> | <input type="checkbox"/> |
| 62 | Are there shiny metallic particles in the oil? | <input type="checkbox"/> | <input type="checkbox"/> |
| 63 | Does the oil look milky or smell like gasoline? | <input type="checkbox"/> | <input type="checkbox"/> |
| 64 | Remove the oil filler cap. Are there thick, black deposits in the cylinder head? | <input type="checkbox"/> | <input type="checkbox"/> |
| 65 | Sniff the automatic transmission fluid dipstick. Does it smell burnt? | <input type="checkbox"/> | <input type="checkbox"/> |
| 66 | Wipe the dipstick on a clean, white rag. Are there a lot of black particles, or is the fluid dark? | <input type="checkbox"/> | <input type="checkbox"/> |

ENGINE, ADVANCED (REQUIRES A MORE RIGOROUS INSPECTION; CLEAR WITH OWNER FIRST)

- | | | | |
|-----------|---|--------------------------|--------------------------|
| 67 | Check the battery for parasitic drains. Is the standby current more than 75 milliamps? | <input type="checkbox"/> | <input type="checkbox"/> |
| 68 | Check the voltage between the coolant and battery ground. Is it higher than 250 millivolts? | <input type="checkbox"/> | <input type="checkbox"/> |
| 69 | Plug in a scan tool. Are there any pending codes? | <input type="checkbox"/> | <input type="checkbox"/> |
| 70 | Pressure-test the cooling system. Does it leak? | <input type="checkbox"/> | <input type="checkbox"/> |

DEAL BREAKER

- | | | | |
|-----------|--|--------------------------|--------------------------|
| 71 | Do a compression test. Are any of the cylinders 25 percent lower or more than the highest? | <input type="checkbox"/> | <input type="checkbox"/> |
| 72 | Do a cylinder leak-down test. Do any cylinders leak more than 15 percent? | <input type="checkbox"/> | <input type="checkbox"/> |

POWERTRAIN STARTUP

- | | | | |
|-----------|---|--------------------------|--------------------------|
| 73 | Are there any strange noises (belt squeak, exhaust leak)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 74 | Turn the key to the "on" position. Do the warning lights fail to illuminate? | <input type="checkbox"/> | <input type="checkbox"/> |
| 75 | Start the car. Do the warning lights remain on? | <input type="checkbox"/> | <input type="checkbox"/> |
| 76 | Does the airbag light stay on or blink? | <input type="checkbox"/> | <input type="checkbox"/> |
| 77 | Does the engine fail to settle into a consistent idle within a couple of minutes? | <input type="checkbox"/> | <input type="checkbox"/> |
| 78 | Automatic transmission: Put the car in drive. Does it clunk into gear? | <input type="checkbox"/> | <input type="checkbox"/> |
| 79 | Manual transmission: Depress the clutch. Does it feel stiff or jerky? | <input type="checkbox"/> | <input type="checkbox"/> |

ON THE ROAD		Yes	No
80	Drive the car in tight circles in a parking lot. Does anything rub or clunk?	<input type="checkbox"/>	<input type="checkbox"/>
81	Brake firmly. Does the pedal feel soft and mushy?	<input type="checkbox"/>	<input type="checkbox"/>
82	Does the feel of the brake pedal change (e.g., soft one stop, firm the next)?	<input type="checkbox"/>	<input type="checkbox"/>
83	Does the car veer to one side while braking?	<input type="checkbox"/>	<input type="checkbox"/>
84	Drive over some bumps at normal speeds. Does the car bounce up and down after hitting a bump?	<input type="checkbox"/>	<input type="checkbox"/>
85	Do you hear any loud noises from the suspension, such as clunks or creaks?	<input type="checkbox"/>	<input type="checkbox"/>
86	Get up to highway speeds. Is there any vibration?	<input type="checkbox"/>	<input type="checkbox"/>
87	Is the steering wheel off-center when the car is going straight?	<input type="checkbox"/>	<input type="checkbox"/>
88	Do you hear excessive wind noise?	<input type="checkbox"/>	<input type="checkbox"/>
89	Do the interior pieces rattle over bumps?	<input type="checkbox"/>	<input type="checkbox"/>
90	Does the car pull to one side?	<input type="checkbox"/>	<input type="checkbox"/>
91	Accelerate briskly. Does the transmission jerk at the shift points?	<input type="checkbox"/>	<input type="checkbox"/>
92	Does the car accelerate in fits and starts?	<input type="checkbox"/>	<input type="checkbox"/>
93	Manual transmission: Put the car in top gear while driving at 30 mph. Floor the throttle. Do the engine revs climb quickly, as if the clutch is slipping?	<input type="checkbox"/>	<input type="checkbox"/>
DEAL BREAKER			
94	Do you hear any knocking noises from the engine that get faster with higher engine speed?	<input type="checkbox"/>	<input type="checkbox"/>
95	Does the car feel tired, as if it's worn out?	<input type="checkbox"/>	<input type="checkbox"/>
TEST DRIVE (WITH A FRIEND)			
96	Have someone watch the headlamps and marker and brake lights as you operate them. Are any burned out?	<input type="checkbox"/>	<input type="checkbox"/>
97	With your friend standing behind the car, start the engine. Is there sustained visible smoke?	<input type="checkbox"/>	<input type="checkbox"/>
98	With your friend following, drive the car. Do the wheels wobble, or does the vehicle have an odd stance (e.g., it rides low in the rear)?	<input type="checkbox"/>	<input type="checkbox"/>
99	Is there smoke coming from the exhaust during acceleration?	<input type="checkbox"/>	<input type="checkbox"/>
POST-TEST-DRIVE INSPECTION			
100	Look under the hood. Do you hear a hissing noise?	<input type="checkbox"/>	<input type="checkbox"/>
101	Check under the car again. Any sign of fresh fluid leaks?	<input type="checkbox"/>	<input type="checkbox"/>

WHAT IT MEANS

Number of "yes" answers	Conclusion
Fewer than 5	<i>Probably a cream puff</i>
5 to 10	<i>Relatively easy to fix</i>
More than 10	<i>Potentially a time sink, but nothing serious</i>
Fewer than 5	<i>Nothing to fret about—it's a used car</i>
5 to 10	<i>Enough DIY fix-its to last a year</i>
More than 10	<i>Just walk away</i>
Fewer than 3	<i>Make a lowball offer</i>
3 to 6	<i>Proceed with extreme caution</i>
More than 6	<i>Abandon all hope, ye who enter here</i>
DEAL BREAKER	
One or more deal breakers: Dodge this bullet.	

Checking Out a Used Car or Truck

Objectivity and honesty aren't qualities you'll find very often when you talk with used-car people about their wares. Used-car dealers will tell you their vehicles have "been checked out from top to bottom," place fancy stickers on many car windows proclaiming their top-notch condition, and then head for the hills the moment you drive back in with your first problem. Invariably, your problem just isn't one of the things their "service specialists" checked out. Tsk, tsk.

If you will adhere to the first checklist carefully yourself, and have your mechanic adhere to the second, you won't need these folks' help, and you will discover just about every skeleton in any vehicle's closet. The first checklist will require some judgment calls and a good amount of objectivity on your part. Copy the items and take them with you as you shop. Take a flashlight, too.

Personal Used-Car Checklist

1. The name of the previous owner. Insist on a name and number. If the seller resists, ask to see the title. If he still resists, don't buy. The previous owner's name and address should be on the title. Call the owner and ask specifically, "What were the major problems with the vehicle when you owned it?" Don't ask the owner *if* he or she had problems; assume there were problems. You'll get a more direct answer. Note the problems, if any, and add them to your Mechanic's Checklist.

2. Check the exterior. Kneel down by each front fender and look down each side. Look for ripples in the metal or dull paint. Either could indicate that there's been body damage. If the ripples or bad paint cover an area larger than twelve inches, make a note for your mechanic to check the frame. Also look directly at the damaged area and check for the match of the paint. Are you satisfied with the paint job? When you call the owner, ask him, "How badly was the car wrecked?" Again, don't ask him *if* the vehicle was wrecked. If it had damage to the frame or engine compartment, you would do well to look for another vehicle. If you are still interested in the car, plan to drive it at least half a day.

3. Check the moldings around the bumpers, grill, wheel wells, and windows. Are any missing or damaged? Cosmetically, is the vehicle well-kept? Are there signs of small paint bubbles accumulating around the moldings? If you see these small rust bubbles, ask the seller to punch through them firmly with a screwdriver. If the screwdriver continues through the entire piece of metal, the body is rusting from the inside out and will probably require major work. If the bubbles are only surface bubbles, repairs will be less costly. *Any* rust indicates the presence of salt. Be conscious of other rust as you check the vehicle.

4. Open and close all doors. Do they open and close properly? If a door needs to be forced to close, the door may have been hit in an accident. Look carefully at all metal on the bottom and inside of the doors. Are paint bubbles present or are other signs of rust evident? Many doors begin to rust through along the bottom first. If rust is present there, ask the seller to use his screwdriver again. Normally, doors with rusted-through bottom edges will continue to rust even after repairs. If you buy such a vehicle, you may eventually need to replace the doors. Look at all rubber moldings on the doors and adjacent surfaces. Are they brittle or cracked? Rubber moldings are expensive to replace. Make a note.

5. If it's a car, open the trunk. Look carefully at all inside edges. Is there rust present? If so, check it with the screwdriver. Look at the interior walls of the trunk. Are there stains present? Stains are an indication of leaks. If possible, lift up the trunk mat and check for rust. Check the spare tire. Does it match the other tires—e.g., is it a radial if the others are radials? Or, is it the proper small spare for that vehicle? Will the tire make a satisfactory spare? If the tire doesn't match or is barely serviceable, make a note and insist on a different spare. Make sure a jack is in the trunk.

6. Check the wheel wells and undercarriage. Turn the steering wheel completely to the right and look in the left well. Do the opposite for the right well. Are there signs of rust? Are there signs of fresh undercoating? Many sellers will simply spray over rust. Take a screwdriver or knife and scrape away a small portion of the undercoating. If rust is mixed in with the undercoating, don't buy the vehicle—you are probably dealing with a shyster. Check the rear wheel wells, too. Then look under the car with your flashlight. Check the muffler system with the engine running. Are fumes escaping at any point along the system? Are the holes larger than a pinpoint? If so, the system will probably need to be replaced rather than repaired. Has the underside been freshly undercoated? If so, forget the vehicle or plan to spend an hour or so scratching undercoating from the various surfaces. Used-car sellers have absolutely no incentive to undercoat their vehicles other than to hide things. Most rustproofing and undercoating companies won't guarantee or perform their work on used models because the product actually seals in rust; it does not stop it.

If the vehicle is a front-wheel-drive model, look for welding seams along the frame or underbody. Welds can indicate a wrecked vehicle or, worse, *two* wrecked vehicles. Some less-than-reputable dealers are actually taking two wrecked cars and welding them together—and not telling the potential customer. Don't buy a vehicle with extensive welding seams *unless* it's checked out first by a body shop. If the seller has failed to inform you of welding work, do the rest of us a favor and report the incident to your local Better Business Bureau.

7. Check all glass and plastic. Is any broken or cracked? In many states, a cracked front windshield must be replaced. The seller should be responsible for the expense. Check the headlights, park-

ing lights, and taillights. Are they cracked or broken? All broken light covers will need to be replaced.

8. Check the wiper blades. Are they cracked or pitted? They are cheap to replace, but make a note and determine who will replace them.

9. Check any vinyl roof for lumps. Under every lump is a mountain of rust. If the lumps are really numerous, don't buy the car unless the seller will pull the roof and repair the rust. Rust under vinyl roofs can be serious and can actually rust through the roof of the vehicle quickly. Check for tears in the roof. Do they appear large enough to allow water to enter? If so, they must be repaired. Note this and determine with the seller who will bear the expense.

10. Check brake lights, turn signals, hazard lights, parking lights, interior lights, and headlights. Have someone sit in the vehicle and use each one as you watch. Note problems. If any systems are not working properly, don't just assume that a bulb is burnt out. Have the bulb replaced then and check again. Bulbs are cheap to replace. Repairs to electrical systems are normally very expensive.

11. Check for ease of starting. Start the engine cold, and then start it several times after you test-drive. Race the engine under both circumstances, and look for blue smoke shooting from the exhaust. Many sellers will tell you that smoke "simply means the carbon is burning off the rings." Don't believe them. Make a note for your mechanic to test to determine the cause.

12. Open the hood and check the following with the engine off:

A) ALL BELTS AND HOSES. Look on the inside of the belts, not the outside. Are they cracked and dry? They will need to be replaced. Make a note.

B) LOOK FOR CORROSION AND RUST ON THE RADIATOR. If there is any, the radiator probably leaks. Make a note for your mechanic to check it.

C) LOOK AT THE RADIATOR COOLANT. If the coolant is rusty, the cooling system has probably not been maintained. Make a note for your mechanic to determine if the radiator needs to be recored or replaced.

D) LOOK AT THE BATTERY. Are the terminals corroded? Are the wires wearing through? If so, the battery probably has not been maintained. Check the battery case. Is it cracked? If so, the battery will probably need to be replaced. Look at the battery levels. If even one of the cells is dry, the seller obviously doesn't service his vehicle—or the battery is definitely in need of replacement.

13. Leave the hood open and have someone start the engine.

Have him push the accelerator down gently, slowly increasing pressure. Do you hear knocks? Knocking sounds can indicate valve

problems. Make a note. Do you see any signs of leakage on the engine block or attached parts? Leakage can indicate bad seals. Do you hear any clicking or grinding? Both can indicate problems. Let the engine idle for at least five minutes, and then pull the vehicle forward. Are there pools of liquid? Many sellers will tell you, "Oh, that's on the air-conditioner condensation." Likely story. Rub your fingers in the pools. If they are red or brown or clear and slippery, you have problems with the transmission, engine seals, or block. While the engine is running, walk back to the exhaust. Is it pulsing? If so, you could have a bad valve. Check this by holding a dollar bill over the end of the exhaust pipe. If the bill is pulled to the pipe, you have *serious* valve problems. Rub your finger inside the pipe (before it gets hot). Is there oil on your pinkie? If so, the engine is burning oil.

14. Check the interior:

A) LOOK UNDER MATS AND CARPETS. Are there signs of rust or excess wear? You can live with the water, but rust indicates both leakage and rust coming through from the underside, which is very expensive and at times impossible to repair.

B) Again, look for welding seams on both sides of the floorboard. Seams can indicate a wrecked vehicle at best, two pieced together at the worst.

C) LOOK UNDER THE SEAT COVERS. Are they just soiled or are the seats tearing apart?

D) LOOK ALONG THE WINDOWS AND AT THE HEADLINER. Are there signs of stains? Stains always indicate leakage.

E) LOOK FOR MISSING DOOR HANDLES OR CONTROL KNOBS. Are the missing parts important to the operation of the vehicle?

F) CHECK THE HORN, RADIO, WIPERS, AND OTHER ELECTRICAL GADGETS, SUCH AS POWER WINDOWS AND SEATS. Are any inoperative things important to the operation of the vehicle? If so, make a note.

G) START THE ENGINE, CHECK THE OPERATION OF THE AIR CONDITIONER, HEATER, AND DEFROSTER. CHECK ALL GAUGES. If any systems are inoperative, make a note for your mechanic.

H) CHECK THE BRAKES. Don't move the vehicle, but apply strong pressure to the pedal and hold it for at least thirty seconds. If the pedal continues toward the floor, you probably have leakage in your braking system.

I) CHECK THE CLUTCH (for standard transmission). Start the engine, set the parking brake, put the transmission in first gear, and let the clutch out as you slowly press on the gas pedal. The engine should stall when the clutch pedal is one-half to three-quarters of the way up. If it doesn't, you probably need clutch work. Make a note.

J) **CHECK THE AUTOMATIC TRANSMISSION.** With the engine idling and your foot on the brake, slip the transmission from neutral to reverse. If you hear a loud “clunk,” the transmission bands probably need tightening, at the minimum. Make a note. Slip the transmission from neutral to drive, and listen for the same sound.

K) **LOOK AT THE SPEEDOMETER.** Are the miles reasonable for the age of the vehicle, no more than fifteen thousand miles per year? If the miles are unreasonably low, ask the *owner* what the mileage was when he traded the car in. If the vehicle has a conventional odometer, see if the numbers line up evenly; if they don't, the mileage may have been altered. If the vehicle has an electronic speedometer, you will have to rely on the previous owner to confirm its true mileage.

15. **The test-drive.** Tell the seller you will be happy to buy the gas, and you will be happy to have him go with you, but that you would like to drive the vehicle thirty to forty-five minutes. Plan to drive on crowded streets and on uncrowded ones; on bumpy roads and smooth; up and down hills, if there are any in your neck of the woods. Don't be satisfied with a drive around the block. Too many problems with used vehicles don't surface during quick test-drives.

A) **CHECK THE ENGINE PERFORMANCE.** The vehicle should be responsive when cold and warm. There should be no grinding or humming sounds in the rear end or transmission. If there are, make a note for your mechanic.

B) **CHECK THE BRAKES.** The brakes should stop you without pulling, fading, or making unusual noises. Listen for a grinding sound when the brakes are applied. Grinding can indicate worn-out brake pads or worse. At an appropriate place on the highway, slow the car to five miles per hour and apply the emergency brake. If the vehicle does not come to a complete stop immediately, the emergency system is faulty.

C) **CHECK THE STEERING.** Is there lost motion when you turn the wheel back and forth? The vehicle could have linkage problems. Does the steering wheel jerk and resist when you turn it? There are probably power-steering pump problems.

D) **CHECK THE TRANSMISSION.** *If the vehicle is an automatic*, speed up gradually until the gears shift. Is there a clunking sound or a second hesitation before shifting? Hesitation or jerky shifts could indicate problems with a gear mechanism. Slow down to ten miles per hour and then press firmly on the accelerator. Do the gears shift quickly? If you are driving a three-speed automatic, the vehicle should shift two times. If it doesn't, this could indicate gear problems, too. *If the vehicle is a standard shift*, shift several times through all gears from a standstill. Are some gears hard to enter? Is there a grinding sound? Either could indicate linkage problems.

E) **CHECK THE SUSPENSION.** Drive over bumpy roads at slow and fast speeds. At a safe point on the road, veer hard right and left. If either action causes a large amount of bouncing or sway,

your shocks may be defective. Make a note for your mechanic. Now, drive back to the lot and check under the hood again. Is there any fluid on the engine? Is steam or any other vapor rising from the engine? Is the radiator hissing? Make notes.

16. Finally, check the tires. Do they match, four radials or four polyester? If they don't, the tires will have to be changed. Driving with mixed tires can cause excessive tire wear and heating, handling problems, and accidents. Are the tires worn evenly? Look at the rear tires. Are the edges of the tires badly or unevenly worn? If so, your seller has probably placed the front tires on the rear. That's okay, but if any of the four tires show unnecessary wear along the edges, your vehicle is probably out of alignment. Make a note.

These sixteen steps obviously take a good deal of time and attention, but take the time. And don't be self-conscious. Look over each vehicle as if you were going to marry it. If you buy it, that's what you will be doing: living with the thing, warts and all.

Now, look over your checklist. If there are many minor things wrong with the vehicle, don't scratch it from your list. If there is an indication of major things, make sure each of those items is added to the following checklist for your mechanic. Make out a clean, neat sheet for him, and leave room for his notations concerning each item. Leave room also for his cost estimate to repair the car to your satisfaction.

Mechanic's Checklist

1. **Check the Engine** inspect transmission fluid check points, condenser, and rotor check spark plugs and ignition wire
2. **Check Fan and Belts** charging system power steering air conditioner
3. **Check Cooling System** radiator heater bypass hose
4. **Check Battery**
5. **Check Braking System** lining wheel and master cylinders drums and front disks hoses, bearing, grease seals
6. **Check Exhaust System**
7. **Check Suspension** ball joints tie rod end idler arm
8. **Remove Differential Plug and Check Lubricant**
9. **Test-Drive Vehicle**